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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,890	02/27/2002	Narayanan Venkitaraman	CM05034H	2114

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EXAMINER

HARPER, KEVIN C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 06/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,890

Applicant(s)

VENKITARAMAN ET AL.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-13 and 16-23 is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 14 is/are rejected.
- 7) ☒ Claim(s) 2,3,6-10 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

Specification

1. The abstract of the disclosure is objected to because it is longer than 150 words.. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Malki et al. (US 2001/0046223).

2. Malki discloses a method comprising a correspondent node (Figure 3, item 335) of a IP packet network communications system, in response to having sent at least one packet non-optimally to a mobile network node (item 305; para. 50, last nine lines), storing received binding information as a first entry and a second entry in a binding cache (para. 32, lines 15-22; para. 9, lines 10-16; note: the first entry in the binding cache is the home address of the mobile network node and the second entry is the care-of-address of the mobile network node). The first entry indicates an association between the mobile network node and a mobile network (para. 5; para. 9, lines 10-16; note: the entry of the home address of a mobile network node in a binding cache or binding update indicates that it is associated with a mobile network) and the second entry indicates a proxy address associated with the mobile network (para. 5, last nine lines). The method further

comprises the correspondent node upon next attempting to send packets to the mobile network node, consulting the binding cache to determine that packets should be directed to a mobile network based on the first entry (para. 50, last six lines; para. 9, lines 16-27) and that the mobile network is reachable by the proxy address based on the second entry (para. 50, last four lines).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malki et al. (US 2001/0046223) as applied to claim 1 above, and further in view of Troxel et al. (US 2002/0075807).

3. Malki does not disclose that a mobile network node comprises a mobile router. Troxel discloses a mobile network node comprising a mobile router (para. 58, lines 5-8) in an IP-based mobility communication system (para. 32). Therefore, it would have been obvious to one skilled in

the art at the time the invention was made to have a mobile network node comprising a mobile router in the invention of Malki in order to provide users with wireless IP connectivity while traveling in a transportation vehicle.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malki et al. (US 2001/0046223) as applied to claim 1 above, and further in view of Leung (US 6,195,705).

4. Malki does not explicitly disclose that the mobile network node is not a mobile router. Leung discloses that a mobile network node is a laptop (col. 1, line 10). Therefore, it would have been obvious to one skilled in the art at the time the invention was made for the mobile network node of Malki to be a device other than a mobile router in order to allow an end user communications device, such as a laptop, to have IP connectivity while moving throughout a wireless network.

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malki et al. (US 2001/0046223)

5. Malki discloses a host device (Figure 3, item 335) comprising an inherent network interface for connecting the host device to a mobile network node (item 305), where the mobile network node is detachably connected to a mobile network (para. 32, lines 10-14). The host device further comprises a binding cache for storing binding information (para. 32, lines 15-22; para. 9, lines 10-16) in response to having sent at least one packet non-optimally to the mobile network node (para. 50, last nine lines), storing a first entry and a second entry in the binding cache (para. 32, lines 15-22; para. 9, lines 10-16; note: the first entry in the binding cache is the home address of the mobile network node and the second entry is the care-of-address of the mobile network node). The first entry indicates an association between the mobile network node and a mobile network (para. 5; para. 9, lines 10-16; note: the entry of the home address of a mobile network node in a binding

cache indicates that it is associated with a mobile network) and the second entry indicates a proxy address associated with the mobile network (para. 5, last nine lines). The host device determines that packets should be directed to a mobile network based on the first entry (para. 50, last six lines; para. 9, lines 16-27) and that the mobile network is reachable by the proxy address based on the second entry (para. 50, last four lines). However, Malki does not disclose the host device has a processor for consulting the binding cache. Examiner takes Official Notice that a communications device has a processor for executing communication logic in order to inexpensively and flexibly provide a communication function. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have in the host device of Malki a processor for consulting a binding cache to determine proper routing information for a packet.

Allowable Subject Matter

6. Claims 11-13 and 16-23 are allowed.
7. Claims 2-3, 6-10 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Korus et al. (US 2003/0095523; paras. 19-20 and 50), Hanson et al. (US 2002/0098840; para. 431) and Arkko et al. (US 2003/0084293; Figure 3) each discloses a mobile node connected to a mobile router.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays, except Wednesday, from 9:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The fax number for Technology Center (TC) 2600 is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office for TC 2600 at 703-306-0377.

Kevin C. Harper

A handwritten signature in black ink, appearing to read 'KH', is written over the printed name.

June 16, 2002